

ABSTRACT OF THE DISCLOSURE

The invention provides a composite from which concrete featuring a sufficiently high heat resistance can be produced, as well as a high-safety sealed concrete cask having no opening (shielding defect) to offer high shielding performance that can prevent corrosion of an internal canister and release of radioactive material to the exterior. A concrete cask of the invention includes a cask body having a bottom but no lid in itself, and a lid which can open and close off a top opening of the cask body. Both the cask body and the lid are made of concrete manufactured by using a composite including Portland cement or blended cement containing Portland cement, which is mixed with water in such a manner that the content of calcium hydroxide falls in a range of 15% to 60% by mass after hardening through hydration reaction. Metallic heat-transfer fins are embedded in the cask body.